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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/494,240	01/30/2000	Bill J. Pope	6056P	3185

7590

06/02/2003

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EXAMINER

PELLEGRINO, BRIAN E

ART UNIT	PAPER NUMBER
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3738

DATE MAILED: 06/02/2003

27

Please find below and/or attached an Office communication concerning this application or proceeding.

8C

Office Action Summary

Application No.

09/494,240

Applicant(s)

POPE ET AL.

Examiner

Brian E Pellegrino

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 80-122 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 80-122 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/10/03 has been entered.

Priority

Since this application is a continuation-in-part of the prior application, its effective filing date for the new subject matter is 1/30/00. Should applicant desire to obtain the benefit of the filing date of the prior application, attention is directed to 35 U.S.C. 120 and 37 CFR 1.78.

Oath/Declaration

The specification to which the oath or declaration is directed has not been correctly identified. The US patent to which applicants desire to claim priority is an incorrect number, the correct number is US 6,010,533. See MPEP § 601.01(a).

Specification

The disclosure is objected to because of the following informalities: The application claims priority to 08/844395, filed 04/18/97, now US 6,010,533 (not 6010633). Appropriate correction is required.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 80-122 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buechel et al. (5702448) in view of Frushour (5011515). Fig. 1 of Buechel shows a femoral head 18 having a convex articulating surface. Buechel et al. disclose a prosthetic device with a smooth articulating surface having a substrate coated with diamond, col. 10, lines 27-42 and col. 11, lines 1-4. Buechel also discloses to polish the coating, col. 8, lines 47-49 and col. 9, lines 23-25. See col. 6, lines 37-56 for metals used for the substrate. Buechel et al. additionally disclose that CoCr can be used as the metal, col. 10, lines 57-58. It is inherent that the materials have CTEs and moduli that are different since the substrate and coating are different. The coating formed on the substrate is crystalline in structure, col. 8, lines 1-2 and can be interpreted to include interstitial spaces in diamond layer since it has "pores" lines 4-6. It is also inherent that some sp^3 bonds are formed in the coating process, well known in the art, i.e. sintering. However, Buechel does not explicitly disclose a transition zone is formed between the substrate and the diamond or to have substrate surface topographical features. Frushour teaches that composites of diamond joined with metal substrates used in applications *requiring high abrasion resistance* are attached by high temperatures and pressure, col. 1, lines 9-16. The metal substrate inherently provides a solvent-catalyst. Frushour also teaches to use irregularities in the substrate surface to increase the surface area for bonding, col. 3, lines 13-21. Frushour additionally teaches the

topography can be established prior to sintering, col. 4, lines 63-67. It would have been obvious to one of ordinary skill in the art to use the method of joining diamond with a substrate and have a transition zone as taught by Frushour in the femoral head of Buechel such that the attachment is more stronger. The motivation to use Frushour's teaching to form a high impact and abrasion resistant device is that hip joints require great resistance to wear resulting from the pressures exerted on the femoral head.

Response to Arguments

Applicant's arguments filed 3/10/03 have been fully considered but they are not persuasive. Regarding the Buechel reference, it is available as prior art because its effective filing date goes back to 5/13/92 since the 5740448 patent was a continuation of the earlier application having the 1992 date. Additionally all claims are directed to the "transition zone" in the current application and have an effective date of 1/30/00 since this application is a CIP of the other applications.

Conclusion

This is a continuation of applicant's earlier Application No. 09/494240. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

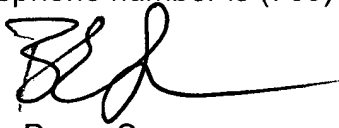
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Pellegrino whose telephone number is (703) 306-5899. The examiner can normally be reached on Monday-Thursday from 8am to 5:30pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be reached at (703) 308-2111. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-2708.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Brian E. Pellegrino
TC 3700, AU 3738

May 27, 2003


Bruce Snow
Primary Examiner

